

grated cable boxes.<sup>64</sup> Therefore, the statutory mandate that the Commission may not prohibit operators from providing navigation devices must have applied to integrated boxes.<sup>65</sup>

The proscription on integrated boxes also conflicts with “the statutory requirement that the Commission not jeopardize the security of multichannel video programming distributors.”<sup>66</sup> Navigation devices that integrate both security and tuner functions are a more “secure method of protecting intellectual property.”<sup>67</sup> Thus, the *Navigation Device Order* threatens to aggravate the very serious crime of cable piracy by requiring “operators to provide a less-than-optimal level of security.”<sup>68</sup>

It is also apparent that a “sunset” on integrated devices after 2005 will be harmful to consumers. Compatibility issues between home electronics equipment and televisions stems from the need to coordinate among different devices. The elimination of new integrated set-top boxes would add an additional device that the consumer would need to purchase. As TIA explained, this “would probably result in even more consumer confusion” and reduce consumer choice.<sup>69</sup> This is particularly true for those “consumers who are not technologically sophisticated.”<sup>70</sup> In addition, integrated devices may generate cost savings that should “redound to the benefit of consumers.”<sup>71</sup>

Perhaps most importantly, by instituting such a ban, the FCC improperly assumes that the market for navigation devices will not experience effective competition. There can be no dispute that the market for televisions and computers is robust. Competitive entrants to the navigation

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<sup>64</sup> NCTA Pet. at 19.

<sup>65</sup> TIA Pet. at 5.

<sup>66</sup> TIA Pet. at 6; *see* 47 U.S.C. § 549(a).

<sup>67</sup> NCTA Pet. at 20.

<sup>68</sup> NCTA Pet. at 20.

<sup>69</sup> TIA Pet. at 7.

<sup>70</sup> NCTA Pet. at 23.

<sup>71</sup> NCTA Pet. at 23.

devices market have demonstrated sophisticated market prowess. For example, Motorola recently announced a new product line for set-top boxes named "Blackbird." This new product combines a variety of communications, computer and home-entertainment technologies in one digital device.<sup>72</sup> Furthermore, Microsoft, Sun Microsystems and other computer and high-technology firms are rapidly developing technology for the digital set-top marketplace. A careful examination of the companies that are participating in the transition to digital technology from analog technology belies any argument that market forces will be ineffective in this portion of the electronics industry. Therefore, the *Navigation Device Order's* prohibition on integrated set-top boxes after 2005 is unnecessary and burdensome.

### CONCLUSION

The Commission has and continues to expend significant resources to usher through the transition from 1950s NTSC technology to the fully digital technology of the 21st century. The obstacles to this transition have been immense. The government for its part has provided spectrum worth billions of dollars to broadcasters free of charge to facilitate this transition. Industry has made large investments in new products ranging from digital receivers to Open Cable set-top boxes. Consumers will be making their own contribution to this transition as they replace working, albeit obsolescent television equipment with digital products. The end result of these investments will be the fully digital, high resolution, high bandwidth services of the future. The Commission should not dilute the investments of industry and consumers away from fully digital products by mandating investments in obsolescent analog set-top box technologies.

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<sup>72</sup> *Motorola Announces TV Set-Top Box That Combines Variety of Digital Tools*, Wall Street Journal, September 14, 1998.

Further, the Commission should not tie the hands of future product developers by proscribing certain product architectures. The marketplace will work so long as the Commission stays out of the way. This process will not be smooth, nor will it be error free. However, history has shown, over and over again, that “rough and tumble” competition in the marketplace ultimately provides consumers with the best products at affordable prices.

For these reasons, and for those explained in detail above, Echelon therefore urges the Commission to grant the NCTA and TIA petitions and reconsider its decisions both to include analog devices in its separation requirements and to prohibit the offering of new integrated set-top boxes after 2005. The Commission should also reject CEMA’s request that the FCC rely on the C3AG in lieu of OpenCable to develop interface standards for digital navigation devices.

Respectfully submitted,

By: Elise P.W. Kiely / AEW

Glenn B. Manishin

Elise P.W. Kiely

Blumenfeld & Cohen—Technology Law Group

1615 M Street, N.W., Suite 700

Washington, DC 20036

202.955.6300

202.955.6460 fax

*Counsel for Echelon Corporation*

Dated: September 23, 1998

## CERTIFICATE OF SERVICE

I, Amy E. Wallace, do hereby certify that on this 23rd day of September, 1998, that I have served a copy of the foregoing document via \*hand delivery and U.S. Mail, postage pre-paid, to the following:

  
Amy E. Wallace

\*Chairman William E. Kennard  
Federal Communications Commission  
1919 M Street, N.W., Rm 814  
Washington, DC 20054

\*Commissioner Susan Ness  
Federal Communications Commission  
1919 M Street, N.W., Rm 832  
Washington, DC 20054

\*Commissioner Michael K. Powell  
Federal Communications Commission  
1919 M Street, N.W., Rm 844  
Washington, DC 20054

\*Commissioner Harold Furchgott-Roth  
Federal Communications Commission  
1919 M Street, N.W., Rm 802  
Washington, DC 20054

\*Commissioner Gloria Tristani  
Federal Communications Commission  
1919 M Street, N.W., Rm 826  
Washington, DC 20054

\*Deborah Lathen, Chief  
Cable Services Bureau  
Federal Communications Commission  
2033 M Street, N.W., Rm 918  
Washington, DC 20054

\*Susan Fox  
Senior Legal Advisor  
Office of Chairman William E. Kennard  
FCC  
1919 M Street, N.W., Rm. 814  
Washington, DC 20554

Anita Wallgren  
Legal Advisor  
Office of Commissioner Susan Ness  
FCC  
1919 M Street, N.W., Rm. 832  
Washington, DC 20554

Benjamin Griffin  
Robert A. Galbreath  
Reed, Smith, Shaw, & McClay  
1301 K Street, N.W.  
1100 East Tower  
Washington, DC 20005

Jonathan D. Blake  
Kurt A. Wimmer  
Erin M. Egan  
Covington & Burling  
1201 Pennsylvania Avenue, N.W.  
Washington, DC 20004-7566

Marlin D. Ard  
Sarah R. Thomas  
Pacific Bell Video Services  
140 New Montgomery Street, 1522 A  
San Francisco, CA 94105

Gregg P. Skall  
Pepper & Corarzzini, L.L.P.  
1776 K Street, N.W., Suite 200  
Washington, DC 20006

Margaret E. Garber  
1275 Pennsylvania Avenue, N.W.  
Washington, DC 20004

James F. Rogers  
James H. Barker  
Nandam M. Joshi  
Latham & Watkins  
1001 Pennsylvania Avenue, N.W., Suite 1300  
Washington, DC 20004-2505

Debra H. Morris  
George D. Callard  
Ameritech New Media, Inc.  
300 S. Riverside Plaza,  
Suite 1800 North  
Chicago, IL 60606

Marvin Rosenberg  
David Vaughan  
Holland & Knight, L.L.P.  
2100 Pennsylvania Avenue, N.W.  
Suite 400  
Washington, DC 20037-3202

Robert S. Schwartz  
Joni Lupovitz  
McDermott, Will, & Emory  
600 13<sup>th</sup> Street, N.W.  
Washington, DC 20005

Richard L. Sharp  
W. Steven Cannon  
Circuit City Stores, Inc.  
9950 Maryland Drive  
Richmond, VA 23233

Andre J. LaChance  
1830 M Street, N.W.  
Suite 1200  
Washington, DC 20036

Becca Gould  
J.D. Marple  
Business Software Alliance  
1150 18<sup>th</sup> Street, N.W.  
Suite 700  
Washington, DC 20036

Stuart E. Overby  
Spectrum Planning  
Motorola, Inc.  
1350 I Street, N.W., Suite 400  
Washington, DC 20005

Daniel Brenner  
Neal M. Goldberg  
Loretta P. Polk  
Counsel for NCTA  
1724 Massachusetts Avenue, N.W.  
Washington, DC 20036

Aaron I. Fleischman  
Arthur H. Harding  
Fleishman & Walsh, L.L.P.  
1400 16<sup>th</sup> Street, N.W., Suite 600  
Washington, DC 20036

Howard S. Shapiro  
Craig A. Gilley  
Fleishman & Walsh, L.L.P.  
1400 16<sup>th</sup> Street, N.W., Suite 600  
Washington, DC 20036

Philip L. Verveer  
Francis M. Buono  
Willkie, Farr, & Gallagher  
Three Lafayette Center  
1155 21<sup>st</sup> Street, N.W., Suite 600  
Washington, DC 20036-3384

David G. Frolio  
David G. Richards  
Karen B. Possner  
BellSouth Corporation  
1133 21<sup>st</sup> Street, N.W., Suite 900  
Washington, DC 20036

Kevin DiLallo  
Levine, Blaszak, Block, Boothby, L.L.P.  
1300 Connecticut Avenue, N.W., Suite 500  
Washington, DC 20036

John I. Taylor  
Nick Mehta  
Zenith Electronics Corp  
1000 N Milwaukee Avenue  
Glenview, IL 60025

John M. Boehm  
Commercial Engineering  
811 South 13<sup>th</sup> Street  
Lincoln, NE 68508

Edward Schor  
Anne Lucey  
Viacom, Inc.  
1515 Broadway  
New York, NY 10036

Allen P. Bierman  
Broadband Products  
Belden Wire and Cable Company  
PO Box 1980  
Richmond, IN 47375-1980

Bill Loughrey  
Corporate Communications Department  
Scientific-Atlanta, Inc.  
One Technology Parkway, South  
Norcross, GA 30092-2967

Matthew J. Flanigan  
Grant E. Seiffert  
Telecommunications Industry Association  
1201 Pennsylvania Avenue, N.W., Suite 315  
Washington, DC 20004-2401

Bruce Hahn  
Computer Technology Industry Association  
6776 Littlefalls Road  
Arlington, VA 22213

Brenda L. Fox  
Gregory L. Cannon  
U.S. West, Inc.  
1020 19<sup>th</sup> Street, N.W., Suite 700  
Washington, DC 20036

John W. Pettit  
Richard J. Arsenault  
Drinker, Biddle, & Reath, L.L.P.  
901 15<sup>th</sup> Street, N.W.  
Washington, DC 20005

Charles C. Hunter  
Catherine M. Hannan  
Hunter Communications Law Group  
1620 Eye Street, N.W., Suite 701  
Washington, DC 20006

Michael R. Gardner  
William J. Gildea, III  
Harvey Kellman  
1150 Connecticut Avenue, N.W., Suite 710  
Washington, DC 20036

John D. Heubusch  
Government Affairs  
Gateway 2000, Inc.  
707 D Street, N.W.  
Washington, DC 20004

Michael H. Hammer  
Todd G. Hartman  
Willkie, Farr, & Gallegher  
Three Lafayette Center  
1155 21<sup>st</sup> Street, N.W., Suite 600  
Washington, DC 20036-3384

Sam Antar  
Law and Regulation  
ABC, Inc.  
77 West 66<sup>th</sup> Street  
New York, NY 10023

David A. Nall  
Jonathan Jacob Nadler  
Squire, Sanders, & Dempsey, L.L.P.  
1201 Pennsylvania Avenue, N.W.,  
PO Box 407  
Washington, DC 20044

Michael F. Altschul  
Lolita D. Smith  
Cellular Telecommunications Industry Association  
1250 Connecticut Avenue, N.W.  
Suite 200  
Washington, DC 20036

Douglas B. Comer  
Intel Corporation  
1634 I Street, N.W.  
Suite 300  
Washington, DC 20036

Fiona Branton  
Information Technology Industry Council  
1250 Eye Street, N.W.  
Suite 200  
Washington, DC 20005

Erwin G. Krasnow  
Michael D. Berg  
John S. Tritak  
Vernen, Liipfert, Bernhard, McPherson, & Hand  
901 15<sup>th</sup> Street, N.W., Suite 700  
Washington, DC 20005

Paul J. Sinderbrand  
Robert D. Primosch  
Wilkinson, Barker, Knauer, & Quinn  
2300 N Street, N.W., Suite 700  
Washington, DC 20037

David R. Pahl  
Michael J. Pierce  
ESPN, Inc.  
ESPN Plaza  
Bristol, CT 06010-7454

George A. Hanover  
Gary S. Klein  
Consumer Electronics Manufacturers Association  
2500 Wilson Blvd  
Arlington, VA 22201

James R. Coltharp  
Comcast Corporation  
1317 F Street, N.W.  
Washington, DC 20004

Howard J. Symons  
Mintz, Levin, Cohn, Ferris, Glovsky, & Popeo, P.C.  
701 Pennsylvania Avenue, N.W.  
Washington, DC 20004

Leo J. Hindrey, Jr.  
Tele-Communications, Inc.  
PO Box 5630  
Denver, CO 80217-5630

John F. Raposa, HQE03J27  
GTE Service Corporation  
PO Box 152092  
Irving, TX 75015-2092

Gail L. Polivy  
1850 M Street, N.W.  
Suite 1200  
Washington, DC 20036

Quincy Rodgers  
Christine G. Crafton  
Faye Morrison  
General Instruments Corporation  
1133 21st Street, N.W., Suite 405  
Washington, DC 20036-3384

Ronald L. Parrish  
Tandy Corporation  
1800 One Tandy Center  
Fort Worth, TX 76102

Jeffrey Krauss  
17 West Jefferson Street  
Suite 106  
Rockville, MD 20850

Morrison G. Cain  
International Mass Retail Association  
1700 North Moore Street  
Suite 2250  
Arlington, VA 22209

John J. Motley, III  
National Retail Federation  
325 7<sup>th</sup> Street, N.W.  
Suite 1000  
Washington, DC 20004

Craig A. Newman  
Bruce D. Gellman  
Corporate Media Partners  
10880 Wilshire Blvd, Suite 1750  
Los Angeles, CA 90024

Gina Harrison  
SBC Communications, Inc.  
1401 I Street, N.W., Suite 1100  
Washington, DC 20005

Andrew R. Paul  
Satellite Broadcasting and Communications Assn  
225 Reinekers Lane, Suite 600  
Alexandria, VA 22314

Richard G. Warren  
NYNEX Telephone Corporation  
1095 Avenue of the Americas, Rm 3831  
New York, NY 10036

Donald J. Russell  
U.S. Department of Justice  
Antitrust Division  
Suite 8000  
1401 H Street, N.W.  
Washington, DC 20001

Robert Nicholson  
Robert J. Wiggers  
Appellate Section, Antitrust Division  
U.S. Department of Justice  
601 D Street, N.W., Room 10535  
Washington, DC 20530